



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,867	10/26/2001	Aleksei V. Gershun	PRE/5	5612
23413	7590	07/14/2004	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			WEBB, GREGORY E	
			ART UNIT	PAPER NUMBER

1751

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,867

Applicant(s)

GERSHUN ET AL.

Examiner

Gregory E. Webb

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 5/11/04
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The applicant's request for RCE filed 5/11/04 has been accepted.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1751

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 1-6, 8-20, 22-25, 27-31, 33-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Cable (US 6,432,897) or alternatively these claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Cable (US 6,432,897).

1. Cable teaches in table I compositions containing 2.5% ethylene glycol monobutyl ether (alcohol), 0.05 diphenyl oxide disulfonate (anionic surfactant), and 0.04998% ammonia.

2. Concerning claim 11, Cable generally teaches the use of ammonium hydroxide in amounts ranging from 0.01-1% of the cleaner (see col. 7, lines 30-40).

Art Unit: 1751

3. Concerning claims 14-17, the broadly defined class of alcohols as defined by claim 1 includes various surfactants compounds taught by Cable including alkoxylated alcohols which are used in amounts ranging from 0-0.75% and exemplified in an amount of 0.05% in example C.

4. Concerning the alcohol content, Cable teaches a preferred range of 1-15% solvent (see col. 3, lines 50-56). Noting that the bottom range of Cable is encompassed by the applicant's claimed range of about 0.001 to about 1% by weight. Noting that the term "about" includes data points above 1%. Also noting that such ranges claimed by applicant actually encompass the range described by Cable as the end point of 1% falls within the applicant's claimed range. Alternatively, the range taught by Cable renders obvious the applicant's claimed range. The examiner is not limited to specific examples. The general teaching of Cable provides one of ordinary skill in the art the required knowledge to formulate compositions clearly overlapping those claimed by applicant.

5. Claims 1-6, 8-20, 22-25, 27-31, 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Choy (US 5,851,981) or alternatively these claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Choy (US 5,851,981).

6. Choy teaches a composition in table I containing 0.05% ammonia and 0.005% sodium lauryl sulfate (surfactant).

7. Choy teaches the use of various surfactants including alcohol ethoxylates (alcohol; see col. 6) in amounts ranging from 0.002-0.75% (see col. 7). Choy teaches the amount of ammonium to range from 0.01-2% of the composition.

Art Unit: 1751

8. Concerning the testing claims, Choy teaches testing methods including applying the surfactant, removing the residue, and testing the performance (see cols. 10-11).

9. Concerning the alcohol, Choy teaches the following:

However, in some of the compositions of this invention, no solvent may be present. A preferred range is about 1-15%, and if a mixed solvent system of alkanol/glycol ether is used, the ratio of alkanol to alkylene glycol ether should be about 1:20 to 20:1, more preferably about 1:10 to 1:10 and most preferably about 1:5 to 5:1. (see col. 4, lines 35-44)

10. Noting that Choy specifically says the solvent is either an alkanol or a combination of alkanol and glycol ethers. The applicant does not exclude the use of glycol ethers. In these proportions the alkanol could be 1/20 the amount of the glycol ether. At this amount, even if the solvent system was used in amounts of 15%, the upper range, alcohol could be chosen at amount of 15/20 of a percent (clearly less than 1%). Thus not only does Choy teach data points within the claimed range but also provides motivation to use lower amounts of alcohol in compositions containing glycol ethers.

11. Alternatively, the choice of low alcohol content is render obvious by Choy. First Choy teaches the addition of solvents beyond the alcohol including glycol ethers. The obvious inclusion of any additional solvents will require the alcohol content to be proportionally lower. Thus it would have been obvious to select lower proportions of alcohols as Choy clearly teaches the ranges overlapping those ranges of alcohols as claimed by applicant.

12. Claims 1-6, 8-10, 12-20, 22-25, 27-31, and 33-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Masters (US 5,362,422) or alternatively these claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Masters (US 5,362,422).

Art Unit: 1751

13. Masters teaches in example I a composition containing glycol ethers, 0.4% ammonium hydroxide, and surfactants.

14. Masters generally teaches the solvent for use in amounts ranging from 1-10% for dilute compositions. Masters generally teaches the use of alcohols and glycol ethers as these solvents including C1-C4 alcohols (see col. 7).

15. Masters generally teaches the surfactant to be used in amounts ranging from 0.1 to 5% surfactant.

16. Masters generally teaches the use of monoethanolamine and beta amino alkanols including (an alcohol; see formula line 55) in amounts ranging from 0.05-2% or preferably from 0.2-5% (see col. 5). Noting that these amounts of alcohols clearly fall within the applicant's claimed range of alcohols.

17. Masters teaches various methods of use including applying, wiping and removal of the cleaner and particulates (see cols. 13-14).

18. Although Masters fails to teach the exact ranges of alcohols as found in the instant claims, Masters clearly teaches a range of alcohols which contains data points clearly falling within the applicant's claimed range. Furthermore, Masters teaches the dilution of their compositions. For examples Masters specifically teaches diluted compositions in the following statement:

(19) The level of amphoteric/zwitterionic detergent surfactant, e.g., HASB, in the composition is typically from about 0.001% to about 15%, preferably from about 0.05% to about 10%, more preferably from about 0.1% to about 5%. The level in the composition is dependent on the eventual level of dilution to make the wash solution. For glass cleaning, the composition, when used full strength, or wash solution containing the composition, should contain from about 0.02% to about 1%, preferably from about 0.05% to about 0.5%, more preferably from about 0.1% to about 0.25%, of detergent surfactant. For removal of difficult to remove soils like grease, the level can, and should be, higher, typically from about 0.1% to about 10%, preferably from about 0.2% to

Art Unit: 1751

about 2%. Concentrated products will typically contain from about 0.2% to about 10%, preferably from about 0.3% to about 5%. It is an advantage of the amphoteric/zwitterionic detergent, e.g., HASB, that compositions containing it can be more readily diluted by consumers since it does not interact with hardness cations as readily as conventional anionic detergent surfactants. Amphoteric/zwitterionic detergents are also extremely effective at very low levels, e.g., below about 1%. (see col. 3 lines 8-31)

19. It is clear from this statement that for certain intended uses such as glass cleaning the compositions are intended to be very dilute. Therefore it would have been obvious when using the compositions of Masters to formulate the composition in a dilute form thus rendering obvious the applicant's claims to a low content solvent composition containing small amounts of alcohols.

20. Claims 1-4, 6-20, 22-24, 28-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Church (US 4,315,828) or alternatively these claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Church (US 4,315,828).

21. Church teaches in table XII a composition containing 0.16% 1-propanol (alcohol), 0.1% ammonium hydroxide, and 0.018% surfactant. Please note that a surfactant is taught in this example and in the amounts required by the applicant. Thus the compositions of Church clearly contains surfactants. Please note the composition is defined in the upper right hand corner of table XII. The rows of this table are specific additives added to this general composition which does indeed contain surfactants.

22. Concerning the alcohol and the amount of alcohol, Church generally teaches in claim 1 the following:

1. A water based cleaning composition consisting essentially of water on the order of about 59.3 to about 99.58 weight percent, a cleaning agent selected from the group consisting of ammonium hydroxide, a monohydroxy alcohol

Art Unit: 1751

containing not more than 3 carbon atoms and mixtures thereof on the order of about 0.31 to about 40.3 weight percent plus an amount of a lubricity compound comprised of a water soluble alkyl derivative of ethylene glycol having the formula $\text{ROCH}_2(\text{CH}_2\text{OCH}_2)_n\text{CH}_2\text{OR}$ OR wherein n is at least 2 and R is an on the order of about 0.025 to about 0.3 weight percent to impart substantial lubricity to the composition.

23. Noting that the lower limit clearly falls within the applicant's claimed range.
24. Although the ranges of alcohol content taught by Church only overlap those of the instant claims, Church provides motivation for lower alcohol content in the following statement:

(27) In general, it has been found that an alcoholic content in the range of about 7% to about 15% by weight is a good range for most normal window and glass cleaning applications. This range will provide good lubricity as well as suitable wicking, evaporation rates, and oil removal properties. Higher alcoholic content may be required for specialized uses such as for cleaning fluids designed for use during freezing weather. Lower alcoholic content may be desirable in extremely dry and hot climates to slow the evaporation rate.

1. Claim 37 is rejected under 35 U.S.C. 102(b) as being anticipated by Aleksejczyk et al (US 5,385,750).
2. Aleksejczyk teaches methods of determining rates of penetration and removal effectiveness of specific compositions containing alkyl glycolside surfactants. Specifically, Aleksejczyk teaches methods of evaluating compositions by measuring the rate of penetration and effectiveness (see cols. 9-10).

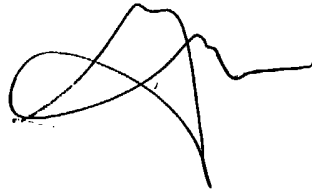
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

Art Unit: 1751

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of a large, stylized loop followed by a horizontal line and a small upward stroke.

Gregory E. Webb
Primary Examiner
Art Unit 1751